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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,813	05/30/2001	Gary W. Beall	29785/10000	6617

4743 7590 12/24/2002

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EXAMINER

PRYOR, ALTON NATHANIEL

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 12/24/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/867,813

Applicant(s)

Beall

Examiner

Alton Pryor

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Oct 2, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-22 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 7, 8, and 25 is/are rejected.
- 7) ☒ Claim(s) 3, 6, 9, 23, 24, and 26 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit:

***Election Requirement***

Applicant argues that the election requirement is too narrow. Examiner acknowledges that Applicant elected pyrrolidones with traverse. This election is acceptable to the Examiner. Examiner argues that election requirement only asked for the Applicant to elect a specific intercalant molecule and is therefore not narrow or unreasonable. The election requirement will be maintained. The election is not allowable (see art rejections below).

***Claim Rejections under 35 U.S.C. 112, 2nd paragraph***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1,25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites the limitation "intercalant ion-dipole" and "surface-modified clay" in lines 5 and 6 respectively. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 25 line 1, the term "type" renders the claim indefinite because it is unclear whether the limitations following the term are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejection under 35 U.S.C. 102(b)***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,7,8,25 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al (US 4875762; 10/24/89). Kato teaches a composition comprising a smectite clay (montmorillonite) intercalated with polyvinyl pyrrolidone (surface modifier intercalant molecule that contains a pyrrolidone). See column 5 line 60 - column 6 line 59. Kato teaches that the polyvinyl pyrrolidone (PVP) is between the clay layers (surface-modified clay). See column 2 line 66 - column 3 line 38. Kato teaches that the montmorillonite intercalated PVP is added to water (cosmetically acceptable carrier). See column 6 lines 45-59. Montmorillonite clay having a cation ion exchange capacity of at least 75 meq./100 g of clay is a physical property of montmorillonite; therefore, said capacity is an inherent property of montmorillonite clay. In addition, although the Kato does not state in words that the intercalated bonding between montmorillonite clay and PVP being an ion-dipole on the clay surface, it is inherent that montmorillonite-PVP is intercalated by way ion-dipole interaction. In a claim to a composition a statement to the composition's intend use has no patentable weight.

***Claim Rejection under 35 U.S.C. 103(a)***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit:

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,4,5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato as applied to claims 1,7,8,25. above. See 35 U.S.C. 102(b) rejection above. Kato teaches all that is recited in claims 2,4,5 except for the composition comprising the instant % ranges of clay and/or solvent. However, one having ordinary skill in the art would have been motivated to determine the optimum amounts of clay and/or solvent through routine experimentation. One would have been motivated to do this in order to develop the most effective intercalation compound for coating surfaces.

***Claim Objection / Allowable Subject Matter***

Claims 3,6,9,23,24,26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or suggest the instant invention comprising an alkyl pyrrolidone, a synthetic smectite, or solvent(s) of claim 6. Claims 10-22 are allowable. The prior art does not teach or suggest the instant invention being applied to the skin.

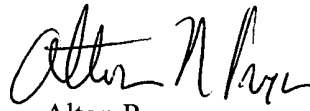
***Telephonic Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton Pryor whose telephone number is (703) 308-4691. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

Art Unit:

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jose Dees, can be reached on (703) 308-4628. The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.



Alton Pryor

Primary Examiner, AU 1616

12/18/02